



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

DEC 10 2010

REPLY TO THE ATTENTION OF:  
WW-16J

Mr. James M. Townsend, Chief  
Regulatory Branch  
U.S. Army Corps of Engineers, Louisville District  
600 Dr. Martin Luther King Place  
Louisville, Kentucky 40202

Re: Bear Run Amendment 4

Dear Mr. Townsend:

The United States Environmental Protection Agency is in receipt of Peabody Midwest Mining, LLC's (Peabody) undated "USEPA Comment Response Letter." Upon review of this letter and attachment and other information available to EPA, we lift our objection to this project based on the assurance that the additional mitigation offered by Peabody will be made a requirement of the Section 404 permit and the concerns included in this letter are addressed. This does not, however, preclude EPA from requesting an Environmental Impact Statement (EIS) for similar projects in the future. Each project will be reviewed on a case-by-case basis.

**Water Quality Standards**

Peabody asserts that "extensive technical analysis and compliance monitoring conducted by Indiana DNR and Peabody clearly and conclusively demonstrates compliance with state water quality standards" at Bear Run. Furthermore, they state that the "Agency continues to rely on unsupported and conclusory statements about potential exceedences based on the size and scope of the project." EPA's National Pollutant Discharge Elimination System (NPDES) personnel have reviewed information regarding the water quality of surface water and discharges within the Busseron Creek watershed, located in Sullivan County, Indiana. In a November 19, 2010 letter to Bruno Pigott, Assistant Commissioner of the Indiana Department of Environmental Management's Office of Water Quality, EPA noted that, according to an analysis of water quality data provided by the Indiana Department of Environmental Management (IDEM), Indiana Department of Natural Resources (IDNR), and information gathered from EPA's Integrated Compliance Information System (ICIS), several streams within the Bear Run site (S-256) do not meet water quality standards. Sulfates and total dissolved solids (TDS) were listed as potential causes of non-attainment. Additionally, the data show elevated levels of sulfates and TDS in the bodies of water to which Bear Run Mine discharges. Effluent violations for iron, pH and TDS under Peabody's NPDES permit,

ING040127 were noted. EPA concluded that the information reviewed “shows that discharges from the Bear Run Mine may cause, have reasonable potential to cause, or contribute to excursions of the numeric and narrative criteria within Indiana’s water quality standards” and requested that IDEM require Peabody to obtain an individual NPDES permit for Bear Run. Peabody must address the apparent inconsistency between their statements regarding compliance with state water quality standards and EPA’s findings.

### **Cumulative Impacts Assessment**

According to Peabody, the cumulative impacts analysis is “comprehensive and complete and complies with applicable Agency regulations and guidance.” While the cumulative impacts analysis is improved, additional information must be provided about reasonably foreseeable future aquatic impacts at the Bear Run site. It has come to our attention that the waters west of the proposed Bear Run Amendment 4 site have been delineated and are being considered for future impacts. The applicant has generally quantified these impacts in previous letters but needs to detail the quality of these aquatic resources.

### **Alternatives Analysis and Avoidance and Minimization**

Peabody states that “coal extraction will extend as far as possible in Areas 1 and 2” and “additional mining progressing beyond the Amendment 4 boundary may also occur in these areas if land control, permitting and coal marketing conditions support such action at the appropriate time in the future.” Peabody is using future mining that will likely occur to the west of this area as justification for mining through these resources but does not include discussion of the resulting environmental impacts. Also, neither the “Impacts Summary” included in the Section 404 application nor the “Operations Map” dated June 2010 indicate that stream 9NS-13 would be impacted by a box cut. In the future, all impacts to waters must be clearly identified and defined within the permit application.

### **Stream and Wetland Mitigation**

Peabody relies very heavily on the success of the West Fork Busseron Creek Mitigation site as a reference for successful mitigation on a mined and reclaimed site. While we recognize the success of this mitigation at the Farmersburg site, this is the only example Peabody has offered. We would like to see additional examples of successful stream and wetland mitigation. For example, information regarding successful ephemeral stream mitigation would be valuable, as 83,324 linear feet of the impacts proposed include ephemeral channels. Peabody is restoring, or has restored, several stream reaches and wetlands beyond the Farmersburg site. Information on the success of these efforts would help to demonstrate that there has been success under multiple and diverse circumstances.

Offsite mitigation proposed by Peabody in the Buttermilk Creek watershed originally consisted of 60 acres of forested wetland mitigation and 18,100 linear feet of

stream mitigation. In response to EPA's comments of November 8, 2010, Peabody expanded its offsite mitigation to 88 acres of forested wetland mitigation and 20,460 linear feet of stream mitigation. EPA appreciates the offer of additional offsite mitigation, but has two major concerns: 1) the water quality of the impoundments located to the east of the proposed mitigation area is unknown and they will provide a portion of the hydrology to the mitigation site; and, 2) it does not appear that Peabody owns or controls the parcels on which the impoundments are located. Peabody must address the water quality and ownership concerns to ensure successful mitigation. If these concerns are adequately addressed, EPA feels that the mitigation has been enhanced to the level at which the severity of impacts (direct, indirect and cumulative) is reduced to an acceptable level under the Guidelines.

### **Monitoring**

The applicant has proposed only one permanent biological monitoring station at 21SW-S7. The applicant's rationale for one sampling point is two-fold: 1) the monitoring locations are generally near culverts and bridges and property access could be prohibited; and, 2) physical monitoring downstream is not perceived as necessary. Under 40 CFR § 230.11, the permitting authority "shall determine in writing the potential short-term or long-term effects of a proposed discharge of dredged or fill material on the physical, chemical, and biological components of the aquatic environment." More specifically, at 40 CFR § 230.11(e), the permitting authority must determine "the nature and degree of effect that the proposed discharge will have, both individually and cumulatively, on the structure and function of the aquatic ecosystem and organisms." The applicant is proposing to impact several 14-digit HUC's with this project. Permanent biological, chemical and physical monitoring stations should be established directly downstream of the mining operation during mining and throughout reclamation within each 14-digit HUC where appropriate. Peabody did mention that two other downstream sites will be monitored throughout the mitigation process but did not identify where the two locations would be.

### **Adaptive Management Plan**

An AMP is required by subpart J of the Guidelines at 40 CFR § 230.94(c). A management strategy must be developed by Peabody to address potential unforeseen changes in site conditions or other components of the compensatory mitigation project. The adaptive management plan will serve as a decision making guide to revise the mitigation plan and implement measures to address both foreseeable and unforeseen circumstances that adversely affect compensatory mitigation success. 40 CFR 230.94 § (c)(12). Peabody's experience in reclamation and mitigation on mine sites should facilitate the expedient development of the required adaptive management plan.

### **Financial Assurances**

EPA accepts Peabody's proposal to commit to not requesting final phase 3 bond release (under SMCRA) on the compensatory mitigation areas until release from monitoring has been granted by the Corps.

### **Long-term Protection of Mitigation Sites**

EPA supports the use of the Corps developed Restrictive Covenant to protect the mitigation areas to the maximum extent possible. We understand that land ownership challenges exist and Peabody will make an effort to issue a "Notice of Mitigation" to the legal owners. In the future, Peabody should have discussions with their lessors regarding the requirements under the Clean Water Act to provide long-term protection for mitigation areas earlier in the process.

As always, we are committed to working the Corps and the applicant to resolve the remaining issues. Please contact Wendy Melgin of my staff with any questions you may have at (312) 886-7745.

Sincerely,

A handwritten signature in dark ink, appearing to read "Peter Swenson".

for

Tinka G. Hyde  
Director, Water Division